

## CLAIMS

What is claimed is:

**[c01]** A video recorder, comprising:

a processor communicating with memory, the memory for storing at least one of i) video data of an event and ii) audio data of the event, the video data comprising a series of picture frames; and

a set of rules stored in the memory, the set of rules specifying at least one of i) multiple regions of interest within a single picture frame and ii) multiple regions of disinterest within the single picture frame, the set of rules dynamically varying a bitrate of the video data associated with each region of interest and with each region of disinterest,

wherein the video data is stored in the memory according to the bitrate specified by the set of rules.

**[c02]** A video recorder according to claim 1, wherein the set of rules specifies multiple bitrates for the regions of interest.

**[c03]** A video recorder according to claim 1, wherein the set of rules specifies multiple bitrates for the regions of disinterest.

**[c04]** A video recorder according to claim 1, wherein the memory stores real-time video data of the event and provides time-delayed video data of the event, the time-delayed video data preceding the event.

**[c05]** A video recorder according to claim 1, wherein the memory stores real-time audio data of the event and provides time-delayed audio data of the event, the time-delayed audio data preceding the event.

- [c06] A video recorder according to claim 1, further comprising a loop buffer, the loop buffer also storing at least one of the video data of the event and the audio data of the event, the loop buffer providing audio data and video data that precedes the event.
- [c07] A video recorder according to claim 6, wherein the set of rules determines when to transfer the contents of the loop buffer to the memory.
- [c08] A video recorder according to claim 1, wherein the memory comprises a mass-storage device, the mass storage device storing the video data of the event.
- [c09] A video recorder according to claim 1, wherein the memory comprises an optical storage device.
- [c10] A video recorder according to claim 1, wherein the memory comprises a memory card.
- [c11] A video recorder according to claim 1, wherein the memory comprises a flash memory storage device.
- [c12] A video recorder according to claim 1, wherein the video recorder interfaces with means for sensing the event and initiates video data of the event.
- [c13] A video recorder according to claim 1, wherein the video recorder interfaces with means for sensing the event and initiates audio data of the event.
- [c14] A video recorder according to claim 1, further comprising an interface to a communications network.

- [c15] A video recorder according to claim 1, wherein the set of rules tags the video data with metadata, the metadata providing a description of a rule that caused the video data to be stored in the memory.
- [c16] A video recorder according to claim 1, wherein the set of rules tags at least one region of interest with metadata, the metadata providing a description of a rule that caused the video data to be stored in the memory.
- [c17] A video recorder according to claim 1, wherein the set of rules tags at least one region of disinterest with metadata, the metadata providing a description of a rule that caused the video data to be stored in the memory.
- [c18] A video recorder, comprising:
- a processor communicating with memory, the memory for storing at least one of audio data and video data of an event, the video data comprising a series of picture frames;
  - a loop buffer also storing at least one of the audio data and the video data of the event, the loop buffer also storing at least one of time-delayed audio data and time-delayed video data that precedes the event;
  - a set of rules stored in the memory, the set of rules specifying at least one of i) multiple regions of interest within a single picture frame, ii) multiple regions of disinterest within the single picture frame, and iii) when to transfer the contents of the loop buffer into the memory, the set of rules dynamically varying a bitrate of the video data associated with each region of interest, associated with each region of disinterest, and associated with the contents of the loop buffer,
- wherein the video recorder provides both real-time and time-delayed audio data and video data of the event.

- [c19] A video recorder according to claim 18, further comprising an interface to a communications network, the interface allowing the video recorder to transfer the audio data and the video data to a remote location via the communications network.
- [c20] A video recorder according to claim 18, further comprising a user interface for configuring the video recorder.